IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Applicant(s): J.S. Lipscomb et al.
Docket No.: SOM920000015US1
Serial No.: 09/749,407
Filing Date: December 28, 2000
Group: 2623
Examiner: David R. O'Steen

Title: Interactive TV Contextual Content Surfing Using Inter-Channel
Hyperlinking: Systems, Methods & Program Products

APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313

Sir:

Applicants (hereinafter referred to as "Appellants") hereby appeal the final rejection of claims 1-14, 16-22 and 24-44 of the above-referenced application.

REAL PARTY IN INTEREST

The present application is assigned to International Business Machines Corporation, as evidenced by an assignment recorded April 16, 2001 in the U.S. Patent and Trademark Office at Reel 11705, Frame 0051. The assignee, International Business Machines Corporation, is the real party in interest.

RELATED APPEALS AND INTERFERENCES

There are no known related appeals and interferences.

STATUS OF CLAIMS

Claims 1-14, 16-22 and 24-44 are pending in the present application, stand rejected under 35 U.S.C. §103(a), and are appealed. Claims 15 and 23 have been canceled.

STATUS OF AMENDMENTS

There have been no amendments filed subsequent to the final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates to Interactive Television systems, methods and program products. More particularly, the invention relates to Interactive TV contextual content surfing using inter-channel hyperlinking systems, methods & program products (Specification, page 1, lines 14-16).

Independent claim 1 provides an interactive television contextual content surfing system. The system comprises a creating apparatus, which creates interactive television program content for hyperlinking to other program content. The system also comprises a broadcast apparatus which broadcasts the interactive television program content with hyperlinks to the other program content; The system further comprises a receiver apparatus which receives and processes the interactive television program content with hyperlinks for display to a viewer. Finally, the system comprises an enabling apparatus, which enables the viewer to hyperlink from interactive television program content being viewed to a related program, the related program being selected by the system based on a profile of the viewer and a program classification category of the interactive television program content being viewed. The profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the interactive television program content being viewed independent of viewer input.

By way of example, an illustrative embodiment of the invention of claim 1 is shown in FIG. 1 of the drawings. FIG. 1 shows a system diagram of an interactive TV contextual content surfing system using inter-channel hyperlinking. The interactive TV contextual content surfing system 100 includes an interactive TV content creation station 102 linked to a TV broadcasting station 104 by

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cable or like and to a Web server 106 and global tracking server 107 by a network 208. The content creator installs hot spots in the content for hyperlinking to other content. The broadcasting station 104 is further linked to a broadcast network 112, serving a plurality of local TV stations 115 including a local tracking server 117 linked to the networks 112 and 108 respectively implementing an interactive TV tracking architecture of the present invention (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Independent claim 7 provides an interactive television contextual content surfing system using inter-channel hyperlinking. The surfing system comprises a content creation station generating and transmitting interactive television program information and classification information as streaming data. The surfing system also comprises a television broadcast station for receiving the streaming data, and a broadcast server for processing classification categories in the streaming data and hyperlinking program information in related categories. The surfing system further comprises a network coupled to the television broadcast station for transmitting in separate channels the interactive television program information and the classification information to a local television station for retransmission to television devices equipped with set-top boxes or for directly transmitting the interactive television program information and the classification information directly to the set-top boxes. Finally, the surfing system comprises viewer means including an interface enabling a viewer to view a program in a classification category and using a hyperlink to switch to a new program related to a program being viewed, the new program being selected by the system based on a profile of the viewer and a program classification category of the program being viewed. The profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input.

By way of example, an illustrative embodiment of the invention of claim 7 is shown in FIG. 1 of the drawings. FIG. 1 shows a system diagram of an interactive TV contextual content surfing system using inter-channel hyperlinking. The interactive TV contextual content surfing system 100

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includes an interactive TV content creation station 102 linked to a TV broadcasting station 104 by cable or like and to a Web server 106 and global tracking server 107 by a network 208. The content creator installs hot spots in the content for hyperlinking to other content. The broadcasting station 104 is further linked to a broadcast network 112, serving a plurality of local TV stations 115 including a local tracking server 117 linked to the networks 112 and 108 respectively implementing an interactive TV tracking architecture of the present invention (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Independent claim 14 provides a method for interactive television contextual content surfing using inter-channel hyperlink. Program content including a description of at least one of program type, producers and players, is created for classification purposes. The program content is transmitted in a streaming data format to a broadcast station and a broadcast server. A correspondence table between program classification categories and television channel numbers is generated in the broadcast server. Hyperlink information of channels that are broadcasting the same nature of programs is created by referencing the correspondence table. The hyperlink information is broadcast to a list of channels in the correspondence table. Broadcast program information is transmit to a television device including a set-top box via a first channel. The hyperlinking information is transmit to the set-top box via a second channel. The hyperlinking information is processed by the set-top box for display on a television screen. A program being viewed is hyperlinked to a related program, the related program being selected based on a profile of a viewer and a program classification category of the program being viewed. The profile of the viewer is deduced from television viewing habits of the viewer, and the program classification category is selected from a plurality of classification categories for the program being viewed independent of viewer input.

By way of example, an illustrative embodiment of the invention of claim 14 is shown in FIG. 1 of the drawings. FIG. 1 shows a system diagram of an interactive TV contextual content surfing system using inter-channel hyperlinking. The interactive TV contextual content surfing system 100

includes an interactive TV content creation station 102 linked to a TV broadcasting station 104 by cable or like and to a Web server 106 and global tracking server 107 by a network 208. The content creator installs hot spots in the content for hyperlinking to other content. The broadcasting station 104 is further linked to a broadcast network 112, serving a plurality of local TV stations 115 including a local tracking server 117 linked to the networks 112 and 108 respectively implementing an interactive TV tracking architecture of the present invention (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Independent claim 22 provides A program medium, executable in a computer system for interactive television contextual content surfing using inter-channel hyperlink. The program medium comprises: program instructions in the medium which creates program content including a description of at least one of program type, producers and players, for classification purposes; program instructions in the medium which transmit the program content in a streaming data format to a broadcast station and a broadcast server; program instructions in the medium which generates a correspondence table between program classification categories and television channel numbers in the broadcast server; program instructions in the medium, which creates a hyperlink information of channels that are broadcasting the same nature of programs by referencing the correspondence table; program instructions in the medium, which broadcasts the hyperlink information to the list of channels in the correspondence table; program instructions in the medium, which transmits broadcast program information to a television device including a set-top box via a first channel; program instructions in the medium which transmits the hyperlinking information to the set-top box via a second channel; program instructions in the medium which processes the hyperlinking information by the set-top box for display on a television and; program instructions in the medium, which hyperlinks from a program being viewed to a related program, the related program being selected by the system based on a profile of a viewer and a program classification category of the program being viewed; wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a

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plurality of classification categories for the program being viewed independent of viewer input.

By way of example, an illustrative embodiment of the invention of claim 22 is shown in FIG. 1 of the drawings. FIG. 1 shows a system diagram of an interactive TV contextual content surfing system using inter-channel hyperlinking. The interactive TV contextual content surfing system 100 includes an interactive TV content creation station 102 linked to a TV broadcasting station 104 by cable or like and to a Web server 106 and global tracking server 107 by a network 208. The content creator installs hot spots in the content for hyperlinking to other content. The broadcasting station 104 is further linked to a broadcast network 112, serving a plurality of local TV stations 115 including a local tracking server 117 linked to the networks 112 and 108 respectively implementing an interactive TV tracking architecture of the present invention (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Independent claim 27 provides a program medium, executable in an interactive television computer system for contextual content surfing. The program medium comprises program instructions which create interactive television program content for hyperlinking to other program content; program instructions which broadcasts the interactive television program content with hyperlinks to the other program content; program instructions which receives and processes the interactive television program content with hyperlinks for display to a viewer; and program instructions, which enables the viewer to hyperlink from interactive television program content being viewed to a related program, the related program being selected by the system based on a profile of the viewer and a program classification category of the interactive television program content being viewed; wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the interactive television program content being viewed independent of viewer input.

By way of example, an illustrative embodiment of the invention of claim 27 is shown in FIG. 1 of the drawings. FIG. 1 shows a system diagram of an interactive TV contextual content surfing

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system using inter-channel hyperlinking. The interactive TV contextual content surfing system 100 includes an interactive TV content creation station 102 linked to a TV broadcasting station 104 by cable or like and to a Web server 106 and global tracking server 107 by a network 208. The content creator installs hot spots in the content for hyperlinking to other content. The broadcasting station 104 is further linked to a broadcast network 112, serving a plurality of local TV stations 115 including a local tracking server 117 linked to the networks 112 and 108 respectively implementing an interactive TV tracking architecture of the present invention (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Independent claim 33 provides a method for contextual content surfing in an interactive television computer system. Interactive television program content is created for hyperlinking to other program content. The interactive television program content is broadcast with hyperlinks to the other program content. The interactive television program content with hyperlinks is received and processed for display to a viewer. The viewer is enabled to hyperlink from interactive television program content being viewed to a related program, the related program being selected by the system based on a profile of the viewer and a program classification category of the interactive television program content being viewed. The profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the interactive television program content being viewed independent of viewer input.

By way of example, an illustrative embodiment of the invention of claim 33 is shown in FIG. 1 of the drawings. FIG. 1 shows a system diagram of an interactive TV contextual content surfing system using inter-channel hyperlinking. The interactive TV contextual content surfing system 100 includes an interactive TV content creation station 102 linked to a TV broadcasting station 104 by cable or like and to a Web server 106 and global tracking server 107 by a network 208. The content creator installs hot spots in the content for hyperlinking to other content. The broadcasting station 104 is further linked to a broadcast network 112, serving a plurality of local TV stations 115

including a local tracking server 117 linked to the networks 112 and 108 respectively implementing an interactive TV tracking architecture of the present invention (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Independent claim 39 provides a broadcast server in a television system. The broadcast server comprises a correspondence table storing means for storing a dynamic table of correspondence between program classification categories and television channel numbers. The broadcast server also comprises creation means for hyperlinking information which contains a list of channels broadcasting the same nature of program by referencing the correspondence table. The broadcast server further comprises transmitting means for transmitting the hyperlinking information to television devices whereby upon successfully processing the hyperlinking information for display on a television screen a viewer surfs among the channels specified in the hyperlinking information as selected by the system based on a profile of the viewer and a program classification category of a program being viewed. The profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input.

By way of example, an illustrative embodiment of the invention of claim 39 is shown in FIG. 1 of the drawings. FIG. 1 shows a system diagram of an interactive TV contextual content surfing system using inter-channel hyperlinking. The interactive TV contextual content surfing system 100 includes an interactive TV content creation station 102 linked to a TV broadcasting station 104 by cable or like and to a Web server 106 and global tracking server 107 by a network 208. The content creator installs hot spots in the content for hyperlinking to other content. The broadcasting station 104 is further linked to a broadcast network 112, serving a plurality of local TV stations 115 including a local tracking server 117 linked to the networks 112 and 108 respectively implementing an interactive TV tracking architecture of the present invention (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams

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describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Independent claim 40 provides a method for surfing hyperlinked information in a television system. Dynamic correspondence information of program classification categories and television channel numbers is formed. Hyperlinking information which contains a list of channels broadcasting the same nature of program is created by referencing the correspondence table. The hyperlinking information is transmitted to television devices whereby upon successfully processing the hyperlinking information for display on a television screen a viewer surfs among the channels specified in the hyperlinking information as selected by the system based on a profile of the viewer and a program classification category of a program being viewed. The profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input.

By way of example, an illustrative embodiment of the invention of claim 40 is shown in FIG. 1 of the drawings. FIG. 1 shows a system diagram of an interactive TV contextual content surfing system using inter-channel hyperlinking. The interactive TV contextual content surfing system 100 includes an interactive TV content creation station 102 linked to a TV broadcasting station 104 by cable or like and to a Web server 106 and global tracking server 107 by a network 208. The content creator installs hot spots in the content for hyperlinking to other content. The broadcasting station 104 is further linked to a broadcast network 112, serving a plurality of local TV stations 115 including a local tracking server 117 linked to the networks 112 and 108 respectively implementing an interactive TV tracking architecture of the present invention (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Independent claim 41 provides a receiver for surfing hyperlinked information in a television system. The receiver comprises storing apparatus, which receives program content including hyperlinks and related channels. The receiver also comprises classification information in the storing

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apparatus which relates program content related to related channels. The receiver further comprises control apparatus, which enables a viewer to access the classification information and surf among related channels as selected by the system based on a profile of the viewer and a program classification category of a program being viewed. The profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input.

By way of example, an illustrative embodiment of the invention of claim 41 is shown in FIG. 1 of the drawings. FIG. 1 shows a system diagram of an interactive TV contextual content surfing system using inter-channel hyperlinking. The interactive TV contextual content surfing system 100 includes an interactive TV content creation station 102 linked to a TV broadcasting station 104 by cable or like and to a Web server 106 and global tracking server 107 by a network 208. The content creator installs hot spots in the content for hyperlinking to other content. The broadcasting station 104 is further linked to a broadcast network 112, serving a plurality of local TV stations 115 including a local tracking server 117 linked to the networks 112 and 108 respectively implementing an interactive TV tracking architecture of the present invention (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Independent claim 42 provides a method for surfing hyperlinked information in a television receiver. Program content including hyperlinks is received. Received program content is classified in tables according to the same content. A viewer is enabled to access the tables and surf among the related content based on a profile of the viewer and a program classification category of a program being viewed. The profile of the viewer is deduced from television viewing habits of the viewer, and the program classification category is selected from a plurality of classification categories for the program being viewed independent of viewer input.

By way of example, an illustrative embodiment of the invention of claim 42 is shown in FIG. 1 of the drawings. FIG. 1 shows a system diagram of an interactive TV contextual content surfing

system using inter-channel hyperlinking. The interactive TV contextual content surfing system 100 includes an interactive TV content creation station 102 linked to a TV broadcasting station 104 by cable or like and to a Web server 106 and global tracking server 107 by a network 208. The content creator installs hot spots in the content for hyperlinking to other content. The broadcasting station 104 is further linked to a broadcast network 112, serving a plurality of local TV stations 115 including a local tracking server 117 linked to the networks 112 and 108 respectively implementing an interactive TV tracking architecture of the present invention (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Independent claim 43 provides a broadcast server in a television system. The broadcast server comprises correspondence information between program classification categories and television channel numbers. The broadcast server also comprises creation apparatus which creates hyperlinking information of channels broadcasting the same nature of program classification categories by referencing the correspondence information. The broadcast server further comprises transmitting apparatus which transmits the hyperlinking information to television devices whereby upon successfully processing the hyperlinking information for display on a television screen, a viewer surfs among the channels specified in the hyperlinking information as selected by the system based on a profile of the viewer and a program classification category of a program being viewed The profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input.

By way of example, an illustrative embodiment of the invention of claim 43 is shown in FIG. 1 of the drawings. FIG. 1 shows a system diagram of an interactive TV contextual content surfing system using inter-channel hyperlinking. The interactive TV contextual content surfing system 100 includes an interactive TV content creation station 102 linked to a TV broadcasting station 104 by cable or like and to a Web server 106 and global tracking server 107 by a network 208. The content creator installs hot spots in the content for hyperlinking to other content. The broadcasting station

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104 is further linked to a broadcast network 112, serving a plurality of local TV stations 115 including a local tracking server 117 linked to the networks 112 and 108 respectively implementing an interactive TV tracking architecture of the present invention (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Independent claim 44 provides a receiver for surfing hyperlinked information in a television system. The receiver comprises storing apparatus, which receives program content including hyperlinks and related channels. The receiver also comprises classification information of program content related to the same channels. The receiver further comprises control apparatus, which enables a viewer to access the classification information and surf among related channels as selected by the system based on a profile of the viewer and a program classification category of a program being viewed. The profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input.

By way of example, an illustrative embodiment of the invention of claim 44 is shown in FIG. 1 of the drawings. FIG. 1 shows a system diagram of an interactive TV contextual content surfing system using inter-channel hyperlinking. The interactive TV contextual content surfing system 100 includes an interactive TV content creation station 102 linked to a TV broadcasting station 104 by cable or like and to a Web server 106 and global tracking server 107 by a network 208. The content creator installs hot spots in the content for hyperlinking to other content. The broadcasting station 104 is further linked to a broadcast network 112, serving a plurality of local TV stations 115 including a local tracking server 117 linked to the networks 112 and 108 respectively implementing an interactive TV tracking architecture of the present invention (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Dependent claims 5, 31 and 37 provide the grouping of program content at a receiver by deduction based on the profile of the viewer comprising information provided by the viewer. By way of example, an illustrative embodiment of the invention of claims 5, 31 and 37 is shown in FIG. 1 of the drawings. FIG. 1 shows a system diagram of an interactive TV contextual content surfing system using inter-channel hyperlinking (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Dependent claim 13 provides a local storing apparatus in the set-top box which stores recorded programs and classification categories in a third classification table. By way of example, an illustrative embodiment of the invention of claim 13 is shown in FIG. 1 of the drawings (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Dependent claims 18 and 26 provide the storing of recorded programs in a local storage and the program classification categories in local storage in a third classification table. By way of example, an illustrative embodiment of the invention of claims 18 and 26 is shown in FIG. 1 of the drawings (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

Dependent claim 12 provides a set-top box apparatus which stores classification categories in a television program guide in a second classification table. By way of example, an illustrative embodiment of the invention of claim 12 is shown in FIG. 1 of the drawings (Specification, page 8, line 15 through page 9, line 16). FIG. 4 is a flow diagram for direct channel hyperlinking in the system of FIG. 1 (Specification, page 11, line 12 through page 12, line 4). FIGS. 5 and 5A are flow

diagrams describing alternative embodiments for the hyperlinking shown in FIG. 4 (Specification, page 12, line 5 through page 15, line 3).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

I. Claims 39-44 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,665,870 (hereinafter "Finseth") in view of U.S. Patent No. 6,020,880 (hereinafter "Naimpally") and U.S. Patent No. 6,973,663 (hereinafter "Brown").

II. Claims 14, 16, 17, 19-22, 24 and 25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Finseth in view of U.S. Patent No. 6,240,555 (hereinafter "Shoff"), Naimpally and Brown.

III. Claims 1-4, 6, 27-30, 32, 33-36 and 38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Finseth in view of U.S. Patent No. 6,367,078 (hereinafter "Lasky"), Naimpally and Brown.

IV. Claims 7-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Finseth in view of Shoff, Lasky, Naimpally and Brown.

V. Claims 5, 31 and 37 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Finseth in view of Lasky, Naimpally and Brown.

VI. Claim 13 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Finseth in view of Shoff, Lasky, Naimpally, Brown and U.S. Patent No. 6,714,722 to Tsukidate (hereinafter "Tsukidate").

VII. Claims 18 and 26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Finseth in view of Shoff, Naimpally, Brown and Tsukidate.

VIII. Claim 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Finseth in view of Shoff, Lasky, Naimpally, Brown and U.S. Patent No. 6,732,369 to Schein et al. (hereinafter "Schein").

ARGUMENT

Appellants incorporate by reference herein the disclosures of all previous responses filed in the present application, namely, responses dated December 10, 2004, August 8, 2005, October 4,

2005, March 29, 2006, July 14, 2006 and December 5, 2006. Sections I through VIII to follow will respectively address grounds I through VIII presented above.

I. Obviousness rejection of Claims 39-44

With regard to the rejection of claims 39-44 under 35 U.S.C. 103(a) as being unpatentable over Finseth in view of Naimpally and Brown, Appellants respectfully assert that the cited combination fails to establish a prima facie case of obviousness under 35 U.S.C. §103(a), as specified in M.P.E.P. §2143.

As set forth therein, M.P.E.P. §2143 states that three requirements must be met to establish a prima facie case of obviousness. First, the cited combination must teach or suggest all the claim limitations. Second, there must be a reasonable expectation of success. Third, there must be some suggestion or motivation to combine reference teachings. Thus, it is sufficient to show that a prima facie case of obviousness has not been established by showing that only one of the requirements has not been met.

The collective teachings of Finseth, Naimpally and Brown fail to suggest or to render obvious all of the elements of the independent claims. For at least this reason a prima facie case of obviousness has not been established.

Independent claim 39 recites a broadcast server in a television system having a correspondence table storing means for storing a dynamic table of correspondence between program classification categories and television channel numbers. The broadcast server also has creation means for hyperlinking information which contains a list of channels broadcasting the same nature of program by referencing the correspondence table. The broadcast server also has transmitting means for transmitting the hyperlinking information to television devices. Upon successfully processing the hyperlinking information for display on a television screen, a viewer surfs among the channels specified in the hyperlinking information as selected by the system based on a profile of the viewer and a program classification category of a program being viewed. The profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input

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The Examiner contends that Finseth discloses each of the limitations of independent claim 39 except for the selection of the related program by the system based on a profile of the viewer and a program classification category of a program being viewed wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed. Appellants also assert that Finseth fails to disclose a dynamic table of correspondence between program classification categories and television channel numbers. The Examiner further contends that the limitations not disclosed in Finseth are provided in Naimpally and Brown. Appellants respectfully disagree.

Naimpally discloses a method and apparatus for requesting, receiving, processing and providing information containing substantially all of the television information for a region from a dedicated electronic program guide server (EPGS) to a television viewer. The Examiner contends that information is filtered by the service provider and/or television receiver based on selected program categories and a user provided profile.

However, in column 6, lines 44-56, Naimpally states that the amount of data obtained from the EPGS may be limited by means of a viewer profile provided to the EPGS during user subscription initialization, and which may contain program preferences. "The program preferences may delete any particular form of programming, such as all sports programming or programs rated R or TV M for example, and include any form of programming, such as classical music programs," lines 52-56. Thus, the selected program categories referred to in Naimpally and relied upon by the Examiner are selected by the user during subscription initialization as a means to limit the amount of data obtained by the electronic program guide. The list of channels provided to the user in Naimpally is not based on a classification category selected by the system for the program being viewed, and therefore, does not necessarily contain the same nature of program. This is further evidenced by the fact that the information provider in Naimpally is "separate and distinct from video signals received by the television receiver" (Abstract).

The Examiner admits that the combined teaching of Finseth and Naimpally fails to disclose that channels specified are selected using a classification category selected by the system independent of viewer input. Appellants further assert that the combined teaching of Finseth and Naimpally fails to disclose that the channels specified are selected by the system based on a program

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classification category of a program being viewed, where the program classification category is selected by the system from a plurality of classification categories for the program being viewed. The Examiner further contends that such limitations not disclosed in the combined teachings of Finseth and Naimpally are provided in Brown. Appellants respectfully disagree.

Brown discloses a device that detects and displays similar programs within a video system. Brown performs a similarity search based on attributes characterizing television programs. Appellants first assert that Brown fails to disclose that the program selected for a similarity search is a program being viewed. Further, while Brown teaches that a program has attributes used in the similarity search, Appellants assert that Brown fails to disclose the selection of a category for the program by the system. Further, Appellants assert that Brown fails to disclose that the program category is selected from a plurality of categories for that program. Finally, Brown fails to disclose that a single attribute for a television program being viewed is selected by the system for use in selecting similar programs. Thus, the combined teaching of Finseth, Naimpally and Brown fails to disclose the selection specified channels based on a program classification category of a program being viewed, where the program classification category is selected by the system from a plurality of classification categories for the program being viewed.

Independent claims 40-44 are patentable for at least the reasons presented above with regard to independent claim 39. Independent claims 40-44 recite the limitation of hyperlinking information selected by the system based on a profile of the viewer and a program classification category selected by the system from a plurality of classification categories for the program being viewed. Accordingly, withdrawal of the § 103(a) rejection of claims 39-44 is therefore respectfully requested.

II. Obviousness rejection of Claims 14, 16, 17, 19-22, 24 and 25

With regard to the rejections of claims 14, 16, 17, 19-22, 24 and 25 under 35 U.S.C. §103(a) as being unpatentable over Finseth, Shoff, Naimpally and Brown, Appellants assert that the cited combination fails to teach, suggest or render obvious all of the claim limitations. Independent claims 14 and 22 recite that a related program is selected by the system based on a program classification category of the program being viewed, where the program classification category is selected by the system from a plurality of classification categories for the program being viewed, as also recited in

independent claims 39-44. Shoff discloses an interactive entertainment system that enables presentation of supplemental interactive content along side traditional broadcast video programs and fails to remedy the deficiencies described above with regard to claims 39-44. Appellants assert that independent claims 14 and 22 are patentable for at least the reason presented above with regard to claims 39-44. Dependent claims 16, 17, 19-21, 24 and 25 are patentable at least by virtue of their dependency from independent claims 14 and 22, and also recite patentable subject matter in their own right. Therefore, the combined teaching of Finseth, Shoff, Naimpally and Brown does not result in Appellant's invention as recited in the subject claims and Appellant's invention as recited in the subject claims is not obvious in view of the combined teaching of Finseth, Shoff, Naimpally and Brown. Accordingly, withdrawal of the rejection of claims 16, 17, 19-21, 24 and 25 under 35 U.S.C. §103(a) is therefore respectfully requested.

III. Obviousness rejection of Claims 1-4, 6, 27-30, 32, 33-36 and 38

With regard to the rejections of claims 1-4, 6, 27-30, 32, 33-36 and 38 under 35 U.S.C. §103(a) as being unpatentable over Finseth, Lasky, Naimpally and Brown, Appellants assert that the cited combination fails to teach, suggest or render obvious all of the claim limitations. Independent claims 1, 27 and 33 recite that a related program is selected by the system based on a program classification category of the interactive television program content being viewed, where the program classification category is selected by the system from a plurality of classification categories for the interactive television program content being viewed, as also recited in independent claims 39-44. Lasky discloses an electronic program-guide system that enables a viewer of a television program in a particularly category to surf sideways to another program in the same category and fails to remedy the deficiencies described above with regard to claims 39-44. Appellants assert that independent claims 1, 27 and 33 are patentable for at least the reason presented above with regard to claims 39-44. Dependent claims 2-4, 6, 28-30, 32, 34-36 and 38 are patentable at least by virtue of their dependency from independent claims 1, 27 and 33, and also recite patentable subject matter in their own right. Therefore, the combined teaching of Finseth, Lasky, Naimpally and Brown does not result in Appellant's invention as recited in the subject claims and Appellant's invention as recited in the subject claims is not obvious in view of the combined teaching of Finseth, Lasky,

Naimpally and Brown. Accordingly, withdrawal of the rejection of claims 1-4, 6, 27-30, 32, 33-36 and 38 under 35 U.S.C. §103(a) is therefore respectfully requested.

IV. Obviousness rejection of Claims 7-11

With regard to the rejections of claims 7-11 under 35 U.S.C. §103(a) as being unpatentable over Finseth, Shoff, Lasky, Naimpally and Brown, Appellants assert that the cited combination fails to teach, suggest or render obvious all of the claim limitations. Independent claim 7 recites that a new program related to the program being viewed is selected by the system based on a program classification category of the program being viewed, where the program classification category is selected by the system from a plurality of classification categories for the program being viewed, as also recited in independent claims 39-44. As described above both Shoff and Lasky fail to remedy the deficiencies described above with regard to claims 39-44. Appellants assert that independent claim 7 is patentable for at least the reason presented above with regard to claims 39-44. Dependent claims 8-11 are patentable at least by virtue of their dependency from independent claim 7, and also recite patentable subject matter in their own right. Therefore, the combined teaching of Finseth, Shoff, Lasky, Naimpally and Brown does not result in Appellant's invention as recited in the subject claims and Appellant's invention as recited in the subject claims is not obvious in view of the combined teaching of Finseth, Shoff, Lasky, Naimpally and Brown. Accordingly, withdrawal of the rejection of claims 7-11 under 35 U.S.C. §103(a) is therefore respectfully requested.

V. Obviousness rejection of Claims 5, 31 and 37

With regard to the rejections of claims 5, 31 and 37 under 35 U.S.C. §103(a) as being unpatentable over Finseth, Lasky, Naimpally and Brown, Appellants assert that the cited combination fails to teach, suggest or render obvious all of the claim limitations. Dependent claims 5, 31 and 37 are patentable at least by virtue of their dependency from independent claims 1, 27 and 33, and also recite patentable subject matter in their own right. Therefore, the combined teaching of Finseth, Lasky, Naimpally and Brown does not result in Appellant's invention as recited in the subject claims and Appellant's invention as recited in the subject claims is not obvious in view of

the combined teaching of Finseth, Lasky, Naimpally and Brown. Accordingly, withdrawal of the rejection of claims 5, 31 and 37 under 35 U.S.C. §103(a) is therefore respectfully requested.

VI. Obviousness rejection of Claim 13

With regard to the rejections of claim 13 under 35 U.S.C. §103(a) as being unpatentable over Finseth, Shoff, Lasky, Naimpally, Brown and Tsukidate, Appellants assert that the cited combination fails to teach, suggest or render obvious all of the claim limitations. Tsukidate discloses a digital multimedia recorder with enhanced EPG-related functions and fails to remedy the deficiencies described above with regard to claims 39-44. Appellants have asserted that independent claim 7 is patentable for at least the reason presented above with regard to claims 39-44. Dependent claim 13 is patentable at least by virtue of its dependency from independent claim 7, and also recites patentable subject matter in its own right. Therefore, the combined teaching of Finseth, Shoff, Lasky, Naimpally, Brown and Tsukidate does not result in Appellant's invention as recited in the subject claims and Appellant's invention as recited in the subject claims is not obvious in view of the combined teaching of Finseth, Shoff, Lasky, Naimpally, Brown and Tsukidate. Accordingly, withdrawal of the rejection of claim 13 under 35 U.S.C. §103(a) is therefore respectfully requested.

VII. Obviousness rejection of Claims 18 and 26

With regard to the rejections of claims 18 and 26 under 35 U.S.C. §103(a) as being unpatentable over Finseth, Shoff, Naimpally, Brown and Tsukidate, Appellants assert that the cited combination fails to teach, suggest or render obvious all of the claim limitations. As described above, Tsukidate fails to remedy the deficiencies described above with regard to claims 39-44. Appellants have asserted that independent claims 14 and 22 are patentable for at least the reason presented above with regard to claims 39-44. Dependent claims 18 and 26 are patentable at least by virtue of their dependency from independent claims 14 and 22, and also recite patentable subject matter in their own right. Therefore, the combined teaching of Finseth, Shoff, Naimpally, Brown and Tsukidate does not result in Appellant's invention as recited in the subject claims and Appellant's invention as recited in the subject claims is not obvious in view of the combined
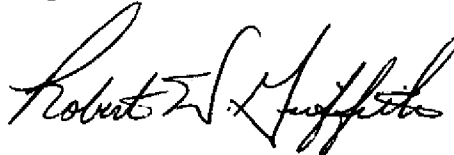
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teaching of Finseth, Shoff, Naimpally, Brown and Tsukidate. Accordingly, withdrawal of the rejection of claims 18 and 26 under 35 U.S.C. §103(a) is therefore respectfully requested.

VIII. Obviousness rejection of Claim 12

With regard to the rejections of claim 12 under 35 U.S.C. §103(a) as being unpatentable over Finseth, Shoff, Lasky, Naimpally, Brown and Schein, Appellants assert that the cited combination fails to teach, suggest or render obvious all of the claim limitations. Schein discloses systems and methods for providing television schedule information to a viewer, and for allowing the viewer to link, search, select and interact with information in a remote database and fails to remedy the deficiencies described above with regard to claims 39-44. Appellants have asserted that independent claim 7 is patentable for at least the reason presented above with regard to claims 39-44. Dependent claim 12 is patentable at least by virtue of its dependency from independent claim 7, and also recites patentable subject matter in its own right. Therefore, the combined teaching of Finseth, Shoff, Lasky, Naimpally, Brown and Schein does not result in Appellant's invention as recited in the subject claims and Appellant's invention as recited in the subject claims is not obvious in view of the combined teaching of Finseth, Shoff, Lasky, Naimpally, Brown and Schein. Accordingly, withdrawal of the rejection of claim 12 under 35 U.S.C. §103(a) is therefore respectfully requested.

In view of the above, Appellants believe that claims 1-14, 16-22 and 24-44 are in condition for allowance, and respectfully request withdrawal of the §103(a) rejections.

Respectfully submitted,

Date: April 5, 2007

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CLAIMS APPENDIX

1. An interactive television contextual content surfing system comprising:

creating apparatus, which creates interactive television program content for hyperlinking to other program content;

broadcast apparatus which broadcasts the interactive television program content with hyperlinks to the other program content;

receiver apparatus which receives and processes the interactive television program content with hyperlinks for display to a viewer; and

enabling apparatus, which enables the viewer to hyperlink from interactive television program content being viewed to a related program, the related program being selected by the system based on a profile of the viewer and a program classification category of the interactive television program content being viewed;

wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the interactive television program content being viewed independent of viewer input.

2. The system of Claim 1 wherein the enabling apparatus enables the viewer to hyperlink from a scheduled or recorded program to a related program.

3. The system of Claim 1 wherein the enabling apparatus enables the viewer to hyperlink to a recording dialog when a related program may be in progress, previously recorded or scheduled or broadcast in the future.

4. The system of Claim 1 wherein the broadcast apparatus transmits the interactive television program content and the program classification category together or in separate channels to the receiver apparatus; and wherein the control apparatus enables the viewer to interact with the interactive television program content.

5. The system of Claim 1 further comprising:

control apparatus at the receiver apparatus which groups program content by deduction based on the profile of the viewer comprising information provided by the viewer.

6. The system of Claim 1 wherein the receiver apparatus provides alternative hyperlinking of program content.

7. An interactive television contextual content surfing system using inter-channel hyperlinking, comprising:

a content creation station generating and transmitting interactive television program information and classification information as streaming data;

a television broadcast station for receiving the streaming data;

a broadcast server for processing classification categories in the streaming data and hyperlinking program information in related categories;

a network coupled to the television broadcast station for transmitting in separate channels the interactive television program information and the classification information to a local television station for retransmission to television devices equipped with set-top boxes or for directly transmitting the interactive television program information and the classification information directly to the set-top boxes; and

viewer means including an interface enabling a viewer to view a program in a classification category and using a hyperlink to switch to a new program related to a program being viewed, the new program being selected by the system based on a profile of the viewer and a program classification category of the program being viewed;

wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input.

8. The system of Claim 7 further comprising:

storing apparatus in the broadcast server that stores a dynamic table of correspondence between the classification categories and television channel numbers.

9. The system of Claim 7 further comprising:

server apparatus which creates a hyperlink list of channels that are broadcasting the same nature of programs by referencing a correspondence table.

10. The system of Claim 7 further comprising:

server apparatus which transmits the hyperlink information to the set-top box on a separate channel.

11. The system of Claim 7 further comprising:

set-top box apparatus which stores television broadcasts by classification categories in a first classification table.

12. The system of Claim 7 further comprising:

set-top box apparatus which stores classification categories in a television program guide in a second classification table.

13. The system of Claim 7 further comprising:

local storing apparatus in the set-top box which stores recorded programs and classification categories in a third classification table.

14. A method for interactive television contextual content surfing using inter-channel hyperlink, comprising the steps of:

creating program content including a description of at least one of program type, producers and players, for classification purposes;

transmitting the program content in a streaming data format to a broadcast station and a broadcast server;

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generating a correspondence table between program classification categories and television channel numbers in the broadcast server;

creating hyperlink information of channels that are broadcasting the same nature of programs by referencing the correspondence table;

broadcasting the hyperlink information to a list of channels in the correspondence table;

transmitting broadcast program information to a television device including a set-top box via a first channel;

transmitting the hyperlinking information to the set-top box via a second channel;

processing the hyperlinking information by the set-top box for display on a television screen; and

hyperlinking from a program being viewed to a related program, the related program being selected based on a profile of a viewer and a program classification category of the program being viewed;

wherein the profile of the viewer is deduced from television viewing habits of the viewer, and the program classification category is selected from a plurality of classification categories for the program being viewed independent of viewer input.

16. The method of Claim 14 further comprising the step of

creating a hyperlink list of channels that are broadcasting the same nature of programs by referencing the correspondence table.

17. The method of Claim 14 further comprising the step of

storing a dynamic table of correspondence between the program classification categories and the television channel numbers.

18. The method of Claim 14 further comprising the step of:

storing recorded programs in a local storage and the program classification categories in the local storage in a third classification table.

19. The method of Claim 14 further comprising the step of:

storing television broadcasts by program classification categories in a first classification table including a television program guide in the set-top box.

20. The method of Claim 14 further comprising the step of:

transmitting in separate channels the program content and program classification categories to a local television station for retransmission to television devices equipped with set-top boxes or directly transmitting the program content and program classification categories directly to the set-top boxes.

21. The method of Claim 14 further comprising the step of:

generating and transmitting the program content and program classification categories in a data-streaming format.

22. A program medium, executable in a computer system for interactive television contextual content surfing using inter-channel hyperlink, comprising:

program instructions in the medium which creates program content including a description of at least one of program type, producers and players, for classification purposes;

program instructions in the medium which transmit the program content in a streaming data format to a broadcast station and a broadcast server;

program instructions in the medium which generates a correspondence table between program classification categories and television channel numbers in the broadcast server;

program instructions in the medium, which creates hyperlink information of channels that are broadcasting the same nature of programs by referencing the correspondence table;

program instructions in the medium, which broadcasts the hyperlink information to the list of channels in the correspondence table;

program instructions in the medium, which transmits broadcast program information to a television device including a set-top box via a first channel;

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program instructions in the medium which transmits the hyperlinking information to the set-top box via a second channel;

program instructions in the medium which processes the hyperlinking information by the set-top box for display on a television and;

program instructions in the medium, which hyperlinks from a program being viewed to a related program, the related program being selected by the system based on a profile of a viewer and a program classification category of the program being viewed;

wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input.

24. The program medium of Claim 22 further comprising:

creating a hyperlink list of channels that are broadcasting the same nature of programs by referencing the correspondence table.

25. The program medium of Claim 22 further comprising:

storing a dynamic table of correspondence between the program classification categories and the television channel numbers.

26. The program medium of Claim 22 further comprising:

storing recorded programs in a local storage and the program classification categories in local storage in a third classification table.

27. A program medium, executable in an interactive television computer system for contextual content surfing, comprising:

program instructions which create interactive television program content for hyperlinking to other program content;

program instructions which broadcasts the interactive television program content with hyperlinks to the other program content;

program instructions which receives and processes the interactive television program content with hyperlinks for display to a viewer; and

program instructions, which enables the viewer to hyperlink from interactive television program content being viewed to a related program, the related program being selected by the system based on a profile of the viewer and a program classification category of the interactive television program content being viewed;

wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the interactive television program content being viewed independent of viewer input.

28. The program medium of Claim 27 further comprising:

program instructions, which enables a the viewer to hyperlink from a scheduled or recorded program to a related program.

29. The program medium of Claim 27 further comprising:

program instructions which enables a the viewer to hyperlink to a recording dialog when a related program may be in progress, previously recorded or scheduled or broadcast in the future.

30. The program medium of Claim 27 further comprising:

program instructions which broadcasts the interactive television program content and the program classification category together or in separate channels to a receiver; and

program instructions, which enables the viewer to interact with the interactive television program content.

31. The program medium of Claim 27 further comprising:

program instructions which groups program content at a receiver by deduction based on the profile of the viewer comprising information provided by the viewer.

32. The program medium of Claim 27 further comprising:

program instructions, which provides alternative hyperlinking of program content.

33. A method for contextual content surfing in an interactive television computer system, comprising the steps of:

creating interactive television program content for hyperlinking to other program content;

broadcasting the interactive television program content with hyperlinks to the other program content;

receiving and processing the interactive television program content with hyperlinks for display to a viewer; and

enabling the viewer to hyperlink from interactive television program content being viewed to a related program, the related program being selected by the system based on a profile of the viewer and a program classification category of the interactive television program content being viewed;

wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the interactive television program content being viewed independent of viewer input.

34. The method of Claim 33 further comprising the step of:

enabling the viewer to hyperlink from a scheduled or recorded program to a related program.

35. The method of Claim 33 further comprising the step of:

enabling the viewer to hyperlink to a recording dialog when a related program may be in progress, previously recorded or scheduled or broadcast in the future.

36. The method of Claim 33 further comprising the step of:

broadcasting the interactive television program content and the program classification category together or in separate channels to a receiver; and

interacting with the interactive television program content.

37. The method of Claim 33 further comprising the step of:

grouping program content at the receiver by deduction based on information provided by the viewer.

38. The method of Claim 33 further comprising the step of:

providing alternative hyperlinking of program content.

39. A broadcast server in a television system, comprising:

a correspondence table storing means for storing a dynamic table of correspondence between program classification categories and television channel numbers;

creation means for hyperlinking information which contains a list of channels broadcasting the same nature of program by referencing the correspondence table, and

transmitting means for transmitting the hyperlinking information to television devices whereby upon successfully processing the hyperlinking information for display on a television screen a viewer surfs among the channels specified in the hyperlinking information as selected by the system based on a profile of the viewer and a program classification category of a program being viewed;

wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input.

40. A method for surfing hyperlinked information in a television system, comprising the steps of:

forming dynamic correspondence information of program classification categories and television channel numbers;

creating hyperlinking information which contains a list of channels broadcasting the same nature of program by referencing the correspondence table, and

transmitting the hyperlinking information to television devices whereby upon successfully processing the hyperlinking information for display on a television screen a viewer surfs among the channels specified in the hyperlinking information as selected by the system based on a profile of the viewer and a program classification category of a program being viewed;

wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input.

41. A receiver for surfing hyperlinked information in a television system, comprising:

storing apparatus, which receives program content including hyperlinks and related channels;

classification information in the storing apparatus which relates program content related to related channels; and

control apparatus, which enables a viewer to access the classification information and surf among related channels as selected by the system based on a profile of the viewer and a program classification category of a program being viewed;

wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input.

42. A method for surfing hyperlinked information in a television receiver, comprising the steps of:

receiving program content including hyperlinks;

classifying received program content in tables according to the same content; and

enabling a viewer to access the tables and surf among the related content based on a profile of the viewer and a program classification category of a program being viewed;

wherein the profile of the viewer is deduced from television viewing habits of the viewer, and the program classification category is selected from a plurality of classification categories for the program being viewed independent of viewer input.

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43. A broadcast server in a television system, comprising:.

correspondence information between program classification categories and television channel numbers;

creation apparatus which creates hyperlinking information of channels broadcasting the same nature of program classification categories by referencing the correspondence information, and

transmitting apparatus which transmits the hyperlinking information to television devices whereby upon successfully processing the hyperlinking information for display on a television screen, a viewer surfs among the channels specified in the hyperlinking information as selected by the system based on a profile of the viewer and a program classification category of a program being viewed;

wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input.

44. A receiver for surfing hyperlinked information in a television system, comprising:

storing apparatus, which receives program content including hyperlinks and related channels;

classification information of program content related to the same channels; and

control apparatus, which enables a viewer to access the classification information and surf among related channels as selected by the system based on a profile of the viewer and a program classification category of a program being viewed;

wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed independent of viewer input.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.